

REMARKS

Claims 1, 2, 3, 5, and 7 - 9 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 – 3, 5, and 7 - 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over each of Panchanathan, (U.S. Pat. No. 5,725,792 cited by the Applicants in the IDS submitted January 4, 2001). This rejection is respectfully traversed.

Claim 1 has been amended to call for magnetic powder that has a particle size in the range of 0.5 – 150 μm . Further, claim 1 has been amended to call for the coercive force to be in the range of 400 – 720 kA/m. As described on page 18 of the specification, when the magnetic powder's particle size lies in this range, oxidation of the magnetic powder and deterioration of its magnetic properties are prevented. As such, Applicants respectfully assert that the Examiner's allegation that Panchanathan's alloy would yield the same magnetic properties as the claimed magnetic powder, because each alloy is made by substantially the same process, is improper. More specifically, Panchanathan teaches that the particle size of its magnetic powder is preferably 200 μm (column 2, lines 15-16), which is much greater than the claimed particle size of 0.5-150 μm . By using a particle size in the range of 0.5 – 150 μm , the claimed invention achieves superior magnetic properties in comparison to Panchanathan.

This is exemplified when comparing the claimed coercive force of 400-720 kA/m with the disclosed coercive forces achieved by Panchanathan. Referring to the Table beneath Example 2 of Panchanathan, it can be seen that the highest coercive force achieved is 5.02 kOe

(399.5 kA/m). This is lower than the lowest value in claimed range of coercive force. Such a difference can be attributed to the particle size of the magnetic powder.

That is, when the particle size is in the claimed range of 0.5-150 μm , the void ratio (porosity) of a bonded magnet may be reduced. As a result, it is possible to raise the density and mechanical strength of the bonded magnet, which further improves the magnetic properties. As such, the claimed magnetic properties are a direct result of the claimed magnetic powder. Further, Panchanathan does not suggest or provide motivation to utilize a particle size in the range of 0.5-150 μm . The claimed particle size, as well as the claimed magnetic powder, therefore, is not obvious.

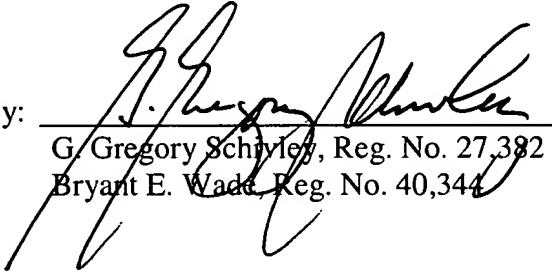
With respect to dependent claims 2, 3, 5, and 7-9, these claims are not obvious for at least the same reasons as their independent base claims, addressed above.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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